

This listing of claims will replace all prior versions, and listings, of claims in the application:

The Status of the Claims

1. (Currently Amended) A method comprising:

generating a processor instruction proxy stub associated with one or more processor instructions; ~~and~~

receiving a managed application program interface associated with a managed runtime environment, the managed application program interface and the managed runtime environment not supporting the one or more processor instructions;

replacing a portion of the managed application program interface with native code supporting the one or more processor instructions to generate an optimized managed application program interface; and

compiling the optimized managed application program interface including the native code using a compiler of a managed runtime environment

generating an optimized managed application program interface based on the processor instruction proxy stub to enable one or more features of a processor associated with the one or more processor instructions.

2. (Original) A method as defined in claim 1, wherein generating the processor instruction proxy stub associated with the one or more processor instructions comprises generating the processor instruction proxy stub at a layer associated with a virtual machine of a managed runtime environment.

3. (Original) A method as defined in claim 1, wherein generating the processor instruction proxy stub associated with the one or more processor instructions comprises generating the processor instruction proxy stub during installation of a managed runtime application.

4. (Original) A method as defined in claim 1, wherein generating the processor instruction proxy stub associated with the one or more processor instructions comprises generating the processor instruction proxy stub associated with one of a Streaming SIMD Extension (SSE) instruction, an SSE2 instruction, and a MultiMedia Extension instruction.

5. (Original) A method as defined in claim 1, wherein generating the processor instruction proxy stub associated with the one or more processor instructions comprises generating the processor instruction proxy stub via marshaling language code of a virtual machine.

6. (Original) A method as defined in claim 1, wherein generating the processor instruction proxy stub associated with the one or more processor instructions of the processor comprises generating the processor instruction proxy stub in response to identifying the processor associated with the one or more processor instructions.

7. (Original) A method as defined in claim 1 further comprising enabling a feature associated with the one or more processor instructions during execution of a managed runtime application based on the optimized managed application program interface.

8. (Currently Amended) A machine accessible medium having instructions, which when executed, cause a machine to:

generate a processor instruction proxy stub associated with one or more processor instructions; and

receive a managed application program interface associated with a managed runtime environment, the managed application program interface and the managed runtime environment not supporting the one or more processor instructions;

replace a portion of the managed application program interface with native code supporting the one or more processor instructions to generate an optimized managed application program interface; and

compile the optimized managed application program interface including the native code using a compiler of a managed runtime environment

~~generate an optimized managed application program interface based on the processor instruction proxy stub to enable one or more features of a processor associated with the one or more processor instructions.~~

9. (Original) A machine accessible medium as defined in claim 8, wherein the instructions cause the machine to generate the processor instruction proxy stub associated with the one or more processor instruction by generating the processor instruction proxy stub at a layer associated with a virtual machine of a managed runtime environment.

10. (Original) A machine accessible medium as defined in claim 8, wherein the instructions cause the machine to generate the processor instruction proxy stub associated

with the one or more processor instructions comprises generating the processor instruction proxy stub during installation of a managed runtime application.

11. (Original) A machine accessible medium as defined in claim 8, wherein the instructions cause the machine to generate the processor instruction proxy stub associated with the one or more processor instructions comprises generating the processor instruction proxy stub associated with one of a Streaming SIMD Extension (SSE) instruction, an SSE2 instruction, and a MultiMedia Extension instruction.

12. (Original) A machine accessible medium as defined in claim 8, wherein the instructions cause the machine to generate the processor instruction proxy stub associated with one or more processor instructions by generating the processor instruction proxy stub via marshaling language code of a virtual machine.

13. (Original) A machine accessible medium as defined in claim 8, wherein the instructions cause the machine to generate the processor instruction proxy stub associated with the one or more processor instructions of the processor by generating the processor instruction proxy stub in response to identifying the processor associated with the one or more processor instructions.

14. (Original) A machine accessible medium as defined in claim 8, wherein the instructions cause the machine to enable a feature associated with the one or more processor instructions for execution of a managed runtime application based on the optimized managed application program interface.

15. (Original) A machine accessible medium as defined in claim 8, wherein the machine accessible medium comprises one of a programmable gate array, application specific integrated circuit, erasable programmable read only memory, read only memory, random access memory, magnetic media, and optical media.

16. (Currently Amended) An apparatus comprising:

a processor instruction proxy stub generator to generate a processor instruction proxy stub associated with one or more processor instructions, ~~and to generate an optimized managed application program interface based on the processor instruction proxy stub to receive a managed application program interface associated with a managed runtime environment, the managed application program interface and the managed runtime environment not supporting the one or more processor instructions, and to replace a portion of the managed application program interface with native code supporting the one or more processor instructions to generate an optimized managed application program interface;~~ and
a compiler to compile the optimized managed application program interface ~~to enable one or more features of a processor associated with the one or more processor instructions including the native code using a compiler of a managed runtime environment.~~

17. (Original) An apparatus as defined in claim 16, wherein the processor instruction proxy stub generator is integrated into one of a virtual machine and the compiler.

18. (Original) An apparatus as defined in claim 16, wherein the processor instruction proxy stub generator identifies a processor associated with the one or more processor instructions to generate the processor instruction proxy stub.

19. (Currently Amended) An apparatus as defined in claim 16, wherein one or more processor instructions comprise one of a Streaming SIMD Extension (SSE) instruction, an SSE2 instruction, and a MultiMedia Extension instruction ~~instruction~~.

20. (Original) An apparatus as defined in claim 16, wherein the compiler comprises a just-in-time compiler.

21. (Original) An apparatus as defined in claim 16, wherein the processor instruction proxy stub is generated at a layer associated with a virtual machine of a managed runtime environment.

22. (Original) An apparatus as defined in claim 16, wherein the optimized managed application interface program enables a feature associated with the one or more processor instructions for execution of a managed runtime application.

23. (Currently Amended) A processor system comprising:
a dynamic random memory (DRAM) to store one or more optimized managed application program interfaces associated with a managed runtime environment; and
a processor coupled to the DRAM to generate a processor instruction proxy stub associated with one or more processor instructions, ~~and to generate an optimized managed~~

application program interface based on the processor instruction proxy stub to enable one or more features of the processor associated with the one or more processor instructions to receive the one or more managed application program interfaces, the one or more managed application program interfaces and the managed runtime environment not supporting the one or more processor instructions, to replace a portion of the one or more managed application program interfaces with native code supporting the one or more processor instructions to generate one or more optimized managed application program interfaces, and to compile the one or more optimized managed application program interfaces including the native code using a compiler of a managed runtime environment.

24. (Currently Amended) A processor system as defined in claim 23, wherein one or more processor instructions comprise one of a Streaming SIMD Extension (SSE) instruction, an SSE2 instruction, and a MultiMedia Extension instruction ~~instruction~~.

25. (Currently Amended) A processor system as defined in claim 23, wherein the processor instruction proxy stub is generated at a layer associated with a virtual machine of ~~the~~ managed runtime environment.

26. (Original) A processor system as defined in claim 23, wherein the processor instruction proxy stub is generated during installation of a managed runtime application.

27. (Currently Amended) A processor system as defined in claim 23, wherein the one or more optimized managed application interface program interfaces enablesenable a

feature associated with the one or more processor instructions during execution of a managed runtime application.